

AMENDMENTS TO THE CLAIMS

Please **AMEND** claim 16 as show below.

Please **ADD** new claims 17-20 as shown below.

The following is a complete list of all claims in this application.

Claims 1-15 (Previously Cancelled).

16. (Currently Amended) A green carbon foam having a density ranging from about 0.1 ~~g·cm³~~ g/cm³ to about 0.6 g/cm³ and a thermal conductivity below about 1 ~~W/m/°K~~ W/m °K manufactured by the process comprising:

placing ~~swelling~~ swelling coal particles in a pressure controlled reactor;

heating the coal particles to a first temperature ranging from about 300°C to about 700°C under a non-oxidizing atmosphere, wherein the pressure of said non-oxidizing atmosphere ranges from about 50 psi to about 500 psi; and

controlling said pressure in said reactor, wherein said pressure is maintained below about 500 psi,

wherein the steps of controlling pressure and heating said coal particles produces said green carbon foam.

17. (New) A cellular coal product comprising:
a body having an open cell structure with pore sizes up to about 500 μm , wherein the body has a compressive strength ranging from about 2000 psi to about 6000 psi and has a thermal conductivity below about 1 W/m $^{\circ}\text{K}$.
18. (New) The cellular coal product of claim 17 wherein the body of carbon foam is largely isotropic having approximately equal physical properties in each direction.
19. (New) The cellular coal product of claim 17 wherein the body of carbon foam has a density ranging from about 0.1 g/cm^3 to about 0.8 g/cm^3 .
20. (New) The cellular coal product of claim 17 wherein the body of carbon foam is semi-crystalline, turbostratically ordered, and is largely isotropic having approximately equal physical properties in each direction.